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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/790,089      | 03/02/2004  | Emmanuel Mermoz      | 0595-1001           | 1187             |

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EXAMINER

AMIRI, NAHID

ART UNIT PAPER NUMBER

3679

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |   |  |
|------------------------------|--------------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/790,089 | <b>Applicant(s)</b><br>MERMOZ, EMMANUEL |  |
|                              | <b>Examiner</b><br>Nahid Amiri       | <b>Art Unit</b><br>3679                 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,8,9,11 and 12 is/are rejected.
- 7) ☒ Claim(s) 4,7 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>exhibit</u> .                          |

## **DETAILED ACTION**

### **Response to Amendment**

In view of Applicant's Amendment received 11 January 2006, amendments to the claims have been entered. Claim 5 withdrawn. Claims 1-12 are pending.

### ***Drawings***

The drawings are objected to because numerous reference numerals have been used to identify all variations of the same name part. As but one example, a shoulder 7D is different variation in all of Figs. 1-6. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claims 2 and 7 are objected to because of the following informalities: Claim 2, line 5, between "all" and "slots" should be inserted --said--; and it appears that the limitations of "all

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external conical ring”, line 5-8 is duplicated limitations of lines 2-4. Claim 7, line 4, between “forming” and “a” should be inserted --at--. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 6, 8, 9, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,927,892 Teh-Tsung.

With respect to claims 1, 3, 6, 8, 9, and 11, Teh-Tsung discloses an assembly (Figs. 1-2) comprising an internal conical ring (40); an external conical ring (50); semi-through side slots (S, see attachment) spread out regularly with respect to one another inside the external conical ring (50); a flange having a ridge housing (60) with a cylindrical axial passage (P, see attachment) coaxially accommodating the internal and external conical rings (40, 50); said internal and external conical rings (40, 50) cooperating through relative axial movement to link frictionally the flange with a hollow shaft (30), an annular space (S, see attachment) defines between an inside surface (61) of the cylindrical axial passage (P) and an outer surface of the external conical ring (50) to engage an end of the hollow shaft (30); wherein the rotating link (R, see attachment) between the rigid housing (60) and the internal conical ring (40); and wherein the annular space (S) is closed on one end and open on another end and extends over the entire length of the external conical ring (50); wherein an inner surface of internal conical ring (40) flares linearly through to transversal face tuned towards the shaft (32) so that a transversal section of the internal conical ring (40) decreases gradually.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teh-Tsung as applied to claims 1, 3, 6, 8, 9, and 11 above, and further in view of US Patent No. 6,783,342 B2 Norman et al.

With respect to claim 2, Teh-Tsung discloses the claimed invention except the semi-through side slots terminate in a first and second ends of transversal faces of the external conical ring. Norman et al. teach a rotor and shaft assembly (Fig. 3) having semi-through side slots (48) terminate alternatively in a first and second end of transversal faces of the external conical ring (42). It would have been obvious to one of ordinary skill in the art at the time of invention was made to terminate the side slots of Teh-Tsung in a first and second ends of transversal faces of the external conical ring as taught by Norman et al. in order to allow the external ring to collapse without permanent distortion against a shaft.

With respect to claim 12, Teh-Tsung discloses an assembly (Figs. 1-2) further comprising a rotating link (R) between the rigid housing (60) and the internal conical ring (40).

***Allowable Subject Matter***

Claims 4, 7, and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior cited references fail to suggest or teach coupling flanges having all the limitations of claims 4, 7, and 10. Because With respect to claim 4, Teh-Tsung, there is lack of

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the rotating link is made of cooperating teeth arranged respectively on an outer perimeter on the internal conical ring and on an inner perimeter of the cylindrical axial passage of the rigid housing. With respect to claim 7, the conical ring has an annular external shoulder forming at a bottom of the annular space and against which is applied to abut a transversal face of the end of the shaft. With respect to claim 10, the internal ring having a threaded cylindrical part opposite to the shaft and cylindrical axial passage of the rigid housing includes a clamping device screwed onto the threaded cylindrical part of the internal ring; and there is no reason to combine the either US Patent No. 5,810,504 Rabinovich, US patent No. 5,474,403 Hetrich.

### *Response to Arguments*

Applicant's arguments with respect to claims 1-4 and 6-12 have been considered but are moot in view of the new ground(s) of rejection.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action, e.g. claim 1, lines 4-5, the limitation of "an internal conical ring; an external conical ring", was not claimed in original claimed invention. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nahid Amiri whose telephone number is (571) 272-8113. The examiner can normally be reached on 8:30-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nahid Amiri  
Examiner  
Art Unit 3679  
March 21, 2006



DANIEL P. STODOLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

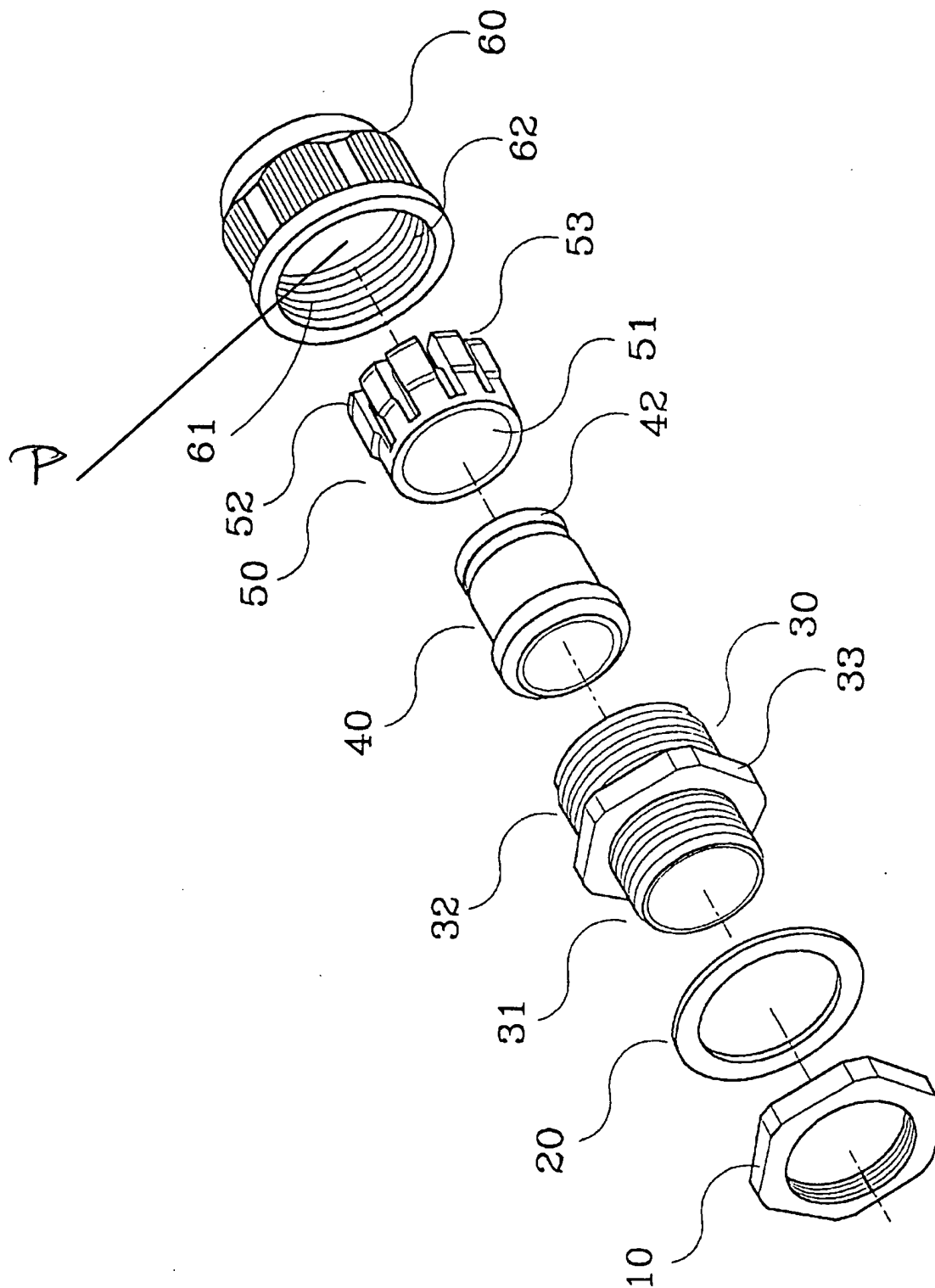


FIG. 1



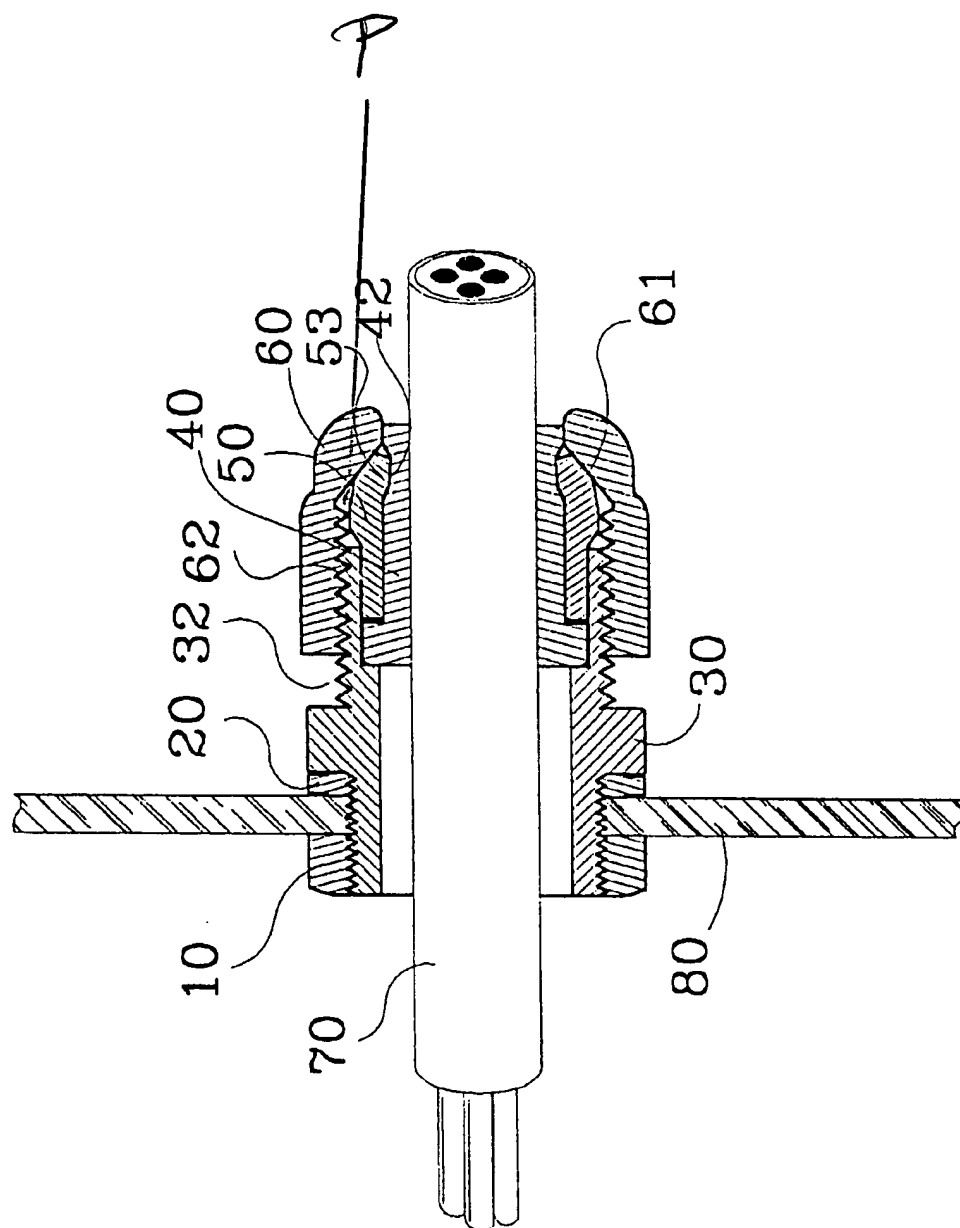


FIG. 3